

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Original): A back illuminated photodetector comprising:

a first conductor type semiconductor substrate;

a second conductive type doped semiconductor region provided in the first superficial surface layer of the semiconductor substrate;

a recessed portion for incidence of to-be-detected light formed in the second surface of the semiconductor substrate and in an area opposite the doped semiconductor region; and

a coating layer made of resin for transmitting the to-be-detected light, the coating layer being provided on the second surface,

the coating layer being arranged in such a manner that the portion provided on the recessed portion in the second surface is sunk lower than the portion provided on the outer edge portion of the recessed portion.

Claim 2 (Original): The back illuminated photodetector according to Claim 1, further comprising a supporting film provided on the first surface of the semiconductor substrate to support the semiconductor substrate.

Claim 3 (Original): The back illuminated photodetector according to Claim 2, further comprising a filling electrode penetrating through the supporting film and connected electrically to the doped semiconductor region at the one end thereof.

Claim 4 (Currently amended): The back illuminated photodetector according to ~~any one of claims 1 to 3~~ to Claim 1, wherein a highly-doped semiconductor region with impurities of the first conductive type added thereto at a high concentration is exposed across the entire side surface of the semiconductor substrate.

Claim 5 (Currently amended): The back illuminated photodetector according to ~~any one of claims 1 to 4~~ to Claim 1, wherein a highly-doped semiconductor layer with impurities of the first conductive type added thereto at a high concentration is provided in the bottom portion of the recessed portion within the second superficial surface layer of the semiconductor substrate.

Claim 6 (Currently amended): The back illuminated photodetector according to ~~any one of claims 1 to 5~~ to Claim 1, wherein a highly-doped semiconductor layer with impurities of the first conductive type added thereto at a high concentration is provided in the second superficial surface layer in the outer edge portion of the semiconductor substrate.